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ABSTRACT

The historic development of the cable phenomenon is traced through industry rhetoric that promised a multitude of services and "voices" in exchange for benign regulations. The current rhetoric of the "wired nation's" latest entrant into the broadband information delivery business--the telcos--also is examined in order to assess possible effects on First Amendment issues and journalistic expression. Although the cable systems of today bear little resemblance to the CATV systems of the 1950s, they still do not offer the "wired nation" services that they promised. Currently, the telephone companies are seeking regulatory relief so that they might provide information and entertainment services that cable now offers. In the process, the telephone companies are resurrecting the "wired nation" promises. It is now the regional telephone operating companies that are promising the communications future through a fiber optic network, and the cable industry that has used the same arguments in the past is crying foul. (Contains 83 references.) (SLD)

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Broadcast News, Cable TV and the Telcos: A Historical Examination of the Rhetorical Forces Affecting the Electronic Distribution of Information to the American Television Public

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for consideration for the 1993 annual meeting in Salt Lake City, Utah
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Abstract

Broadcast News, Cable TV and the Telcos: A Historical Examination of the Rhetorical Forces Affecting the Electronic Distribution of Information to the American Television Public

The purpose of this paper is to trace the historic development of the cable phenomenon (Hollins, 1984) through the industry rhetoric that promised a multitude of services and "voices" in exchange for benign regulations. The paper will also examine current rhetoric of the "wired nation's" latest entrant into the broadband information delivery business -- the telcos -- in order to assess possible effects on First Amendment issues and journalistic expression.

Although the cable systems of today bear little resemblance to the CATV systems of the 1950s, they still do not offer the "wired nation" services that they promised. Currently, the telephone companies are seeking regulatory relief so that they might provide information and entertainment services that cable now offers. In the process, the telephone companies are resurrecting the "wired nation" promises.

Broadcast News, Cable TV and the Telcos: A Historical Examination of the Rhetorical Forces Affecting the Electronic Distribution of Information to the American Television Public

Television, which had been introduced to the public at the New York World's Fair in 1939 (Barnouw, 1968), had been in the developmental stages for nearly fifteen years during which time the public was regularly treated to tantalizing visions of its potential (Lichty & Topping, 1975). But the general public was not to see broadcast television on a regular basis for six years as World War II intervened. Then pent-up consumer demand, a developed industrial complex, and profits from years of network radio broadcasting combined to catapult television into the American social fabric (Sterling & Kittross, 1978). It became one of the most quickly adopted mass communication technologies in history (Rogers, 1986).

The eventual role of the new technology was two-fold -- television became a medium which could both entertain and inform. Capitalizing on the economics of mass distribution, television networks allowed programming to be broadcast simultanously by local television stations nationwide. As the television networks matured, news of national and international importance could be seen as it happened (Friendly, 1967).

The communist threat, the Cold War, Sputnik, the space race, Korea and Vietnam, as well as post-World War II prosperity and burgeoning advertising revenues fueled the emerging television network news machine. Network news became more sophisticated and with that came an increase in budgets, news staffs, foreign bureaus, correspondents, and newsgathering technologies. Network television news became the most used and most credible source of information for the American public (Dominick, 1990). But by the mid-1980s, new owners (ABC--Capital Cities; NBC--General Electric: CBS--Lawrence Tisch) had taken control of the networks and "imposed strong, bottom-line directives which led to a massive number of firings" (Small, 1991, p.106). "Those giddy days of yore when [ratings] were in the low 90 percentiles" (Small, 1991, p. 105) were gone. By Spring 1990, network evening ratings dropped to just above 50% (Small, 1990).

News departments were not immune to the budget cuts. The shrinking ad revenue has hurt news operations and "newsroom costs are being scrutinized in ways that are altering the newsgathering process" ("All the news", 1991, p. 15). These changes at the network level include a greater reliance on affiliated stations for spot news and the possibility of pooled coverage. However, among the most serious change has been either the down-sizing or elimination of several domestic and foreign news bureaus. "In some cases, that has translated into a lone correspondent and/or producer in a city that once housed a full bureau. Technicians.

. . are being switched from full time to freelance or are being replaced by freelancers" ("All the news," 1991, p. 15).

In mid 1991, the Federal Communication Commission's Office of Plans and Policy issued a paper predicting a gloomy future for broadcast TV. "The broadcast industry has suffered an irreversible long-term decline in audience and revenue shares which will continue through the current decade" ("FCC Report concedes," 1991, p. 20). The reason? According to the report, it's cable television. The medium now serves 61.4% of U.S. homes and continues to attract viewers and advertising dollars. "The change in fortunes of broadcasting and cable will likely force massive cost cutting by networks, affiliates and independents" ("FCC Report concedes. . . ", 1991, p. 20).

If things are going bust in network TV, cable is booming, especially when one considers the acceptance of CNN, "one of the great success stories in American journalism" (Small, 1991, p. 105). In ten years, "CNN has won the respect of its competitors, elevated our expectations of TV news, and raised the ante of the game" (Laurence, 1991, p.16). CNN's workforce "soared from its original 225 to more than 1,700" (Laurence, 1991, p.17) and while the networks are consolidating or closing bureaus, CNN spent $2 million in 1991 to open three new offices. The additions bring CNN's bureau count to 27, both domestic and worldwide ("Networks have," 1991).

While the American public may not have very much knowledge or interest in the process or medium through which the news is distributed, the emergence of new distribution technologies is of great public policy interest. Cable television interests fought long and hard for the right to compete with established broadcast interests. Now the cable industry faces new challenges from both impending legislation and new technology and services proposed by the telephone companies.

The purpose of this essay is to trace the historic development of the cable phenomenon (Hollins, 1984) through the industry rhetoric that promised a multitude of services and "voices" in exchange for benign regulations. The paper will also examine current rhetoric of the "wired nation's" latest entrant into the broadband information delivery business -- the telcos -- in order to assess possible effects on First Amendment issues. While not intended to be an exhaustive history, the journalist can compare the rhetoric preceding the development of cable television as a medium of journalistic expression to that of the telcos as they jockey for favored position as future information providers as well as information purveyors.

Diffusion of Communication Technologies

The pattern of futuristic promises for broadcast television, followed by a lag in diffusion, and then subsequent rapid adoption by the public, is not unique. A variation of the pattern has been repeated in three of the four developmental phases of the history of cable television,

although the diffusion process has not been as spectacular as it was in broadcast television.

A review of the literature of both diffusion of innovations and of cable television reveals that, while a significant amount of information has been generated, little study has been undertaken in the area of diffusion and actual adoption of the new services that cable has promised.

One study conducted by Brown, Malecki, Gross, Shrestha and Semple in 1974 (cited in Brown, 1981) examined the establishment of cable television systems in Ohio. The study indicated that diffusion of cable systems throughout Ohio was related to market potential of the area and to the year that the system was established. Another study "found that subscribers are deciding that their experience with cable television does not live up to initial expectations" (Sparkes, 1983).

In 1986, researchers suggested a three-phase diffusion process in the adoption of cable television. In the initial phase, cable television simply provided more of the same broadcast television as existed without cable. The second phase corresponded with the use of cable's more specialized channels; however, these channels were closely related in content to the broadcast channels. The third phase included the more exotic services that broadband cable has promised. But at the time of the study, those new services were not widely available in the market area examined (Sparkes & Kang, 1986).

In a 1987 article entitled "The Cable Fable Revisited: Discourse, Policy, and the Making of Cable Television," Thomas Streeter described a Carnegie Commission report on cable television, as well as a proposal by Harold Bennett, one of its authors, for cable television to serve as an alternative to the broadcast television station. But the "wired city" and "wired nation" did not materialize in the form envisioned by its proponents. Streeter states: ". . . the cable fable is a story of repeated utopian high hopes followed by repeated disappointments" (Streeter, 1987).

Anne Branscomb (1975) suggests that unfilled public service promises are not unique to the cable television industry. She states: "The early legislative debates on the Radio Act of 1927 and the Communication Act of 1934 are replete with promises of great public service responsibility . . . each successive technology has been the repository of these hopes, and has failed them" (Branscomb, 1975, p.51).

When examining discourse on the public policy implications of cable television, Patrick Parsons (1989) suggests that the definition of new communication technologies is evolutionary and not revolutionary. Technologies are constantly being reinvented through social interaction. He continues: "The debate on how other emerging communication technologies will be defined, and thereby controlled, has barely begun" (Parsons, 1989, p. 24).

The futuristic promises of cable television including interactive, non-television, new communication services, such as videotext, alarm systems, banking at home, shopping at home,

or video on demand, have not materialized in a commercially viable form. The unfulfilled promises and wild predictions of these new communication services have been labeled "the cable fable" (Laudon, 1987, P. 28).

These studies indicate that cable television, while successful in providing entertainment programming in the form of network and local television fare, satellite-delivered programs, and premium services, has not delivered on the promise of providing a superhighway of new communication services.

The "s" adoption curve, sometimes used to describe the diffusion process graphically, depicts the percentage of adoption of an innovation over time (Rogers & Shoemaker, 1971). In the early years of an innovation, the graph often shows a flat or slow rate of adoption as communication about the innovation is disseminated, but the rate climbs steeply as the invention, device or concept is accepted by the public, and it then levels as demand for the product or service is satiated (Rogers & Shoemaker, 1971). While the adoption curve for many innovations such as the telephone or the steam engine extended over decades, television made significant gains within two years with the number of homes with television receivers growing from 6,000 in 1946 to 975,000 in 1948 (*Television Factbook: Services Volume*, 1968).

Prior to an innovation reaching general diffusion throughout a mass public, there is a time interval between the invention of the idea, concept, or device and its economic marketability. John Enos in 1962 (cited in Rosenberg, 1976), in a study of the time interval between invention and innovation, identified intervals of major products or devices. He found a time interval of seventy-nine years between the invention of the fluorescent lamp and its marketability. The long-playing record took only three years, wireless telegraphy eight years, and television twenty-two years. Many different factors can be responsible for the lag. These might include the technical inability to mass produce a device that can be created in a laboratory environment, the economic ramifications of the development of the concept, or regulatory constraints that exist at the time of the invention. These external factors can substantially increase the complexity of the diffusion process (Rosenberg, 1976).

Cable television has been diffused throughout the population at a rather slow rate when compared with broadcast television with only a 52.8% adoption rate since its invention forty years ago (*Broadcasting/Cablecasting Yearbook*, 1989). In addition, cable has changed considerably during the past four decades. It has been "reinvented" (Rogers, 1986) several times during that period to reflect the changing communication environment. But even with subsequent reinventions, cable television does not yet resemble the broadband communication highway that was promised by the cable operators in the past and is being resurrected in the rhetoric of the telcos as they position for entry into the information services business. Today's cable television systems bear little technological or functional resemblance to their

predecessors, but they do not constitute the long-predicted wired nation. "Cable television, like many new technologies, has suffered from a Doppler effect of history. Societal and economic benefits are expected long before they are possible. The technology rushes toward us much slower than we want. It's only in retrospect that we notice the speed of the advancements that we have made" (Craft, 1984, p. 95).

Timothy Hollins (1984) has suggested that cable television has developed in four phases, each of which is based upon a new use or function of the medium. In the first phase, cable television served as a community antenna system that allowed broadcast television signals to be extended into valleys or shadow areas of the station's coverage pattern, thus improving reception of an existing station in a geographic area. In the second phase, cable systems imported television signals from distant markets allowing the subscriber to view more signals than would normally be available in his or her geographic region. Cable's third phase of growth came with the addition of non-broadcast signals to the system. During this phase subscribers were provided community channels, cable networks, and pay services. The fourth phase of the development is in its infancy with mainly the promise of the aforementioned non-television services such as home security, home banking, data transfer, electronic mail, and videophone.

These four phases, or "reinventions" of cable television, have been driven both by economic forces and by regulation. An examination of the history of the development of each phase indicates that many studies, publications, and rhetoric preceded the enactment of regulation. The regulation subsequently affected the economic viability of cable television and determined the direction of its growth.

The authors suggest the following stages of cable development which combine the historical, economic, and regulatory influences prepotent in the diffusion process and roughly parallel Hollins' four phases of development. It is additionally suggested that the intent of the rhetoric which preceded each stage was part of a hidden agenda of the cable industry to influence regulation. An agenda adopted by the industry to influence the regulatory environment would not be unusual. All organizations, in defining their objectives and goals, must control and coordinate the resources inherent within their environments (Scott, 1981). These goals and activities may be covert, or occurring under the surface, or they may be overt, or that which can be observed (Perrow, 1961). Davis (1949) observed that "always in human society there is what may be called a double reality--on the one hand a normative system embodying what ought to be, and on the other a factual order embodying what is." Scott (1981) agreed with Davis when he said theorists "Observe a disparity in organizations between the stated and the 'real' goals of action, between the professed or official goals that are announced and the actual or operative goals governing the activities of participants." The latent reality of the cable industry was to influence the regulatory process to its advantage through promises of a communication highway of the future, while the direction that the cable industry actually took once free of

regulatory restraint was based on contemporary market forces and the economics of offering the innovative communication services.

Stage I, Community Antenna Services (1948-1965)

The first cable systems in the United States were established about forty years ago, shortly after the commercial introduction of broadcast television. "In communities that were too distant from broadcasting stations or that were situated in rugged terrain, a master antenna was placed at some advantageous elevation and cables were laid to subscribers' houses, bringing them amplified signals that produced strong, clear pictures" ("A Guide," 1973, p. 34). These systems were necessary because, while the Federal Communications Commission (FCC) considered frequency allocation for the broadcast television service, licensing of stations was suspended; thus, the availability of television lagged behind the demand, and significant portions of the public lived beyond the range of any broadcast television station. By 1952, when the "Sixth Report and Order" lifted the "freeze" on the growth of television, there were only 108 television stations serving the fifteen million television homes in the nation (LeDuc, 1973).

In order to satisfy public demand for television during the "freeze" and the years immediately following, community antenna television systems were established to capture the elusive broadcast signal at the fringe areas of the station's coverage area. Appliance and radio dealers looking for ways to increase sales of television receivers placed antennas at high points near towns and brought the signal by wire and eventually coaxial cable to the homes of those near the appliance stores. Robert Tarlton of Lansford, Pennsylvania and Ed Parsons of Astoria, Oregon are given credit for providing the first community antenna television services to their respective communities in 1949 (Phillips, 1972). Business was brisk and the future of television and the CATV phenomenon was assured as long as the FCC and the natural parameters of the electromagnetic spectrum limited the number of television stations that could serve the public.

Stage II: Signal Importation and the Cable Freeze (1965--1972)

Generally, broadcasters were happy to have their signals extended by the fledgling CATV systems until microwave importation of those signals from one market to another induced increased competition for audiences. At that point, the television stations demanded relief from the FCC in the form of regulation of cable television. The FCC, concerned about the economic health of television stations in the newly-allocated Ultra High Frequency band, moved to protect the broadcaster.

Regulation came swiftly after the Supreme Court consideration of the *Carter Mountain Transmission Corp. v. FCC* (1963) indicated that "the expansion of cable television service would cause economic injury to competing television stations" (LeDuc, 1973, p. 137). In

1965, the FCC "First Report and Order on Cable Television" codified FCC control over microwave-served cable television systems that imported distant television stations into a market served by a local station.

Additional regulation came in 1966 when the FCC assumed control over all cable television systems with the "Second Report and Order on Cable Television." Under this regulation, the cable industry was effectively barred from serving the larger cities unless permission from the local broadcasters was obtained. In the unlikely event that the broadcaster wanted to encourage increased competition from cable-imported television stations, copyright issues provided an additional stumbling block which was removed only after two additional Supreme Court Cases -- *Fortnightly v. United Artists*, (1968), and *CBS v. TelePrompter*, (1974).

The "Second Report and Order on Cable Television" (1966) effectively placed a freeze on the growth of the cable industry between 1966 and 1972. The National Cable Television Association (NCTA), founded as National Community Television Council in 1952 (Phillips, 1972), was active during this period, but in 1968, the Supreme Court decision in *United States v. Southwestern Cable*, affirmed the FCC's right to regulate the cable television industry. As the NCTA and cable industry fought regulatory restraint, copyright questions, distance signal importation limitations, mandatory local origination, and cross ownership limitations, new visions were being developed that would thrust cable into the consciousness of the American public.

Community antenna television was to metamorphose into cable TV. As with the promise of broadcast television thirty years earlier, the wonders of the new communication highway were being sold to the public. One of the first articles expounding on the virtues of broadband cable television appeared in a special issue of *The Nation* in 1970. The article by Ralph Lee Smith, entitled "The Wired Nation," was later expanded into a book of the same title that would have significant impact on the rhetoric driving cable toward its third phase. This work expanded on a concept envisioned by Brenda Maddox in *Communications: The Next Revolution* which predicted a future where "information theory will have been brought to its logical conclusion in public communications; there will be a single unified network for all kinds of messages . . . separate systems for telephones, telegraph, television and data transmission will disappear. Information will flow through the network as on-off digital signals and appear as pictures, sound or print, according to the choice of those sending and receiving it" (cited in Smith, 1972, p. 9).

From this description, it is not difficult to understand the potential markets and money to be made by the range of choices that, in theory, cable could provide to subscribers. Such was the anticipation of cable operators in the early 1970s who stirred with ideas of what they would be able to provide when the matured systems were serving thousands of subscribers. "Economists predict the day when 40 to . . . 80 percent . . . of all homes in the United States will

be 'on the cable" (Sloan Commission on Cable Communications, 1971, p. 2) thus providing an economic base upon which to build a new communication highway.

Other predictions followed quickly as the volume of pro cable rhetoric swelled. The Sloan Commission publication, *On the Cable: The Television of Abundance*, detailed the new communication possibilities ranging from programming for minorities to medical instruction. In addition, it examined regulatory structures and forecasted economic trends (1971). "As an industry, cable was expected to generate $4.4 billion in income by 1980 and would create over a million new jobs" (Tate, 1971, p.13). It would supply more information and diverse programming than broadcast television and, therefore, would better meet the entertainment and information needs of all people. Since more people would stay home to interact with their TV sets, they would "be less likely to attend movies, live performing arts productions, sports attractions, political rallies, educational classes, business seminars and even church. Proposed two-way communication systems [would] reduce the need to leave home for shopping trips, minor medical attention, or repair services" (Tate, 1971, p. 13).

In 1972, the creation of a "national information utility" was proposed that would use cable communications' potential to the fullest. "The social goal of such an information utility could be to provide all persons with equal opportunity of access to all available public information. . . . [it] would look like a combination of a television set, telephone, and typewriter. It would function as a combined library, newspaper, mail order catalog, post office, classroom, and theater" (Parker & Dunn, 1972, p. 1395). These services were believed to be feasible for delivery to most U.S. homes by 1985. In essence, cable television would be the urban superhighway of the information age.

As the FCC began to reconsider its stance toward the cable industry, it did so in an atmosphere of rhetoric and promise of what later came to be known as "blue sky" technologies and services. These were the very services that were to make cable television different from the older CATV systems. They were the services that would take advantage of the multi-channel broadband capabilities of the coaxial cable system. The Electronics Industries Association, in a position paper addressed to the FCC, stated: "We look upon such systems [broadband cable television] as being of 'national resource' dimensions and the development of these resources as a national goal. . . The mushrooming growth in available information and the demand for access to this information is bringing about a revolution in communications which will produce a profound change in the way society is structured and in the way we live" (cited in Smith, 1972, p. 84)

The Sloan Commission on Cable Communications stated: "Cable television will expand mainly because it is capable of providing more of the same type of programs now provided by conventional television and of providing better reception in some areas. . .The expansion of cable communications can mean much more to the American people than better reception and more

conventional programming. This new and immensely powerful technology can also be put to use to serve the public interest in a great variety of ways" (Sloan Commission, 1971, p. ix).

Smith (1972) listed some of those uses such as home library retrieval, facsimile, delivery of mail, crime detection and prevention, and the reduced need for travel as future benefits of cable. He also indicated that local origination on cable could provide local television newscasts in small towns, as well as "religious programs, school activities, county fairs, fund-raising drives, sports, cultural events, political debates, public hearings, school board meetings, children's programs, and daily variety shows featuring local persons and events" (Smith, 1972, p. 10). The concept of local origination and access channels along with exotic communications services was born. This was incorporated into the FCC's third "Cable Television Report and Order" in 1972. The promise of the communication highways of the future had fired the imagination of the regulators as well as the public. The third "Cable Television Report and Order" lifted the freeze on the growth of cable television in the large cities, thus allowing the cable industry to expand into those lucrative markets, but the new FCC rulings also came with a price. The FCC, in effect, demanded that the cable operator provide some of the futuristic services that were promised. The rules required free access channels for the public, the local government, and the local school districts, as well as local origination. In addition, the new cable systems were required to offer a minimum of twenty channels and the capability of two-way transmission. Regulation was designed to force the new broadband communication highways into existence, at least in new systems to be built in major television markets.

Stage III: Non-Broadcast Programming Services (1973--present)

Within months of the promulgation of the new rules, a series of studies conducted by the Rand Corporation and funded by the National Science Foundation described for city governments and for educators how they might take advantage of the new technology, and a report funded by the Aspen Institute, entitled *The Electronic Box Office*, promised that the arts and humanities would prosper on cable television (Adler & Baer, 1974). Other reports from the Sloan Commission on Cable Communications, the Ford Foundation, and The Carnegie Foundation further encouraged the nation to embrace the new highways of communication (Newman, 1971). Thus, while the publicity generated by the various studies on cable television was useful to the industry in bringing pressure to change regulatory patterns, the industry itself was under pressure from the same rhetoric to change the very nature of its business, and change is difficult. The cable industry, however, cried "blue sky" when asked to provide the services that the studies and reports had described, and once again, the public had been promised a communications technology that did not yet exist in an economically viable form.

Operating mainly as an antenna service to provide more television channels and clearer

pictures, cable grew from six million subscribers to twenty-one million subscribers in the ten years between the issuance of the third "Cable Television Report and Order" in 1972 and what became known as the "franchising wars" of the early 1980s (*Television & Cable Factbook: Cable & Services Volume*, 1986). During that interim period, most cable systems continued to provide only over-the-air broadcast signals and a few imported signals and, in general, to operate much like their pre-freeze predecessors, but some attempts at providing the new non-television services were undertaken. The most publicized of these experiments was Warner-Amex's Qube system started in 1977 in Columbus, Ohio. The Qube system enabled the subscriber, using a response box attached to the cable converter, to interact through the cable system with a central computer at the head-end. That interaction would allow the viewer to "vote" on issues presented over a cable channel or to select a movie for viewing in the home on a pay-per-view basis (Davidge, 1986). Another pioneering high technological system was constructed at Leisure World in Mesa, Arizona, in 1973. The Monitor 6 System used a channel on a two-way cable television plant to query every home in the closed retirement community for health, fire and burglary alarm data every six seconds (Wigand & Craft, 1980).

Both of these systems have since discontinued their original interactive services, but a third innovation to be established during this period is now the basis of modern cable television programming abundance. That technology is satellite distribution of programming services. The use of satellite technology by Home Box Office in 1975 to distribute first-run movies to cable systems as a pay service and by an Atlanta independent UHF broadcast station in 1976 ("Milestones," 1988) to reach nationwide cable audiences formed the base from which have sprung more than sixty specialized satellite-distributed cable networks and superstations ("Subscriber," 1989).

With a source of inexpensive satellite-delivered signals, relaxation of the pay cable rules following *Home Box Office v. FCC* (1977), and the promise of new broadband services developed in experiments such as Qube, the cable industry was positioned to move into the broadcast television-rich urban areas. As the large cable multiple system owners (MSO) investigated the urban and suburban markets, local government officials began to eye the cable industry with interest. One provision of the third "Cable Television Report and Order" (1972) provided for the collection of a franchise fee of between three and five percent of the gross revenues of the cable television system. The possibility of a new revenue stream for the city was not lost on local governments. In addition, many studies and publications were directed toward educating city governments on the potential of cable television. The Rand Corporation, with funding from the National Science Foundation, published a series of reports on cable television with some titles directed toward city governments including *A Handbook for Decisionmaking* (Baer, 1973), *The Process of Franchising* (Johnson & Botein, 1973), *Citizen Participation in Planning* (Yin, 1973), *Applications for Municipal Services* (Yin, 1973), *A Guide to Technology*

(Pilnick & Baer, 1973), *Making Public Access Effective* (Kletter, 1973), *and A Guide to Federal Regulations* (Rivkin, 1973). Other reports were published by the Urban Institute (Tate, 1971), community organizations (The Media Project, 1974), university research organizations (Scott, 1976), the American Civil Liberties Union (Powledge, 1972), and citizens advisory committees (Fairbanks, 1974). In an effort to ensure that all local governments were aware of the impact that cable might have on their local community, the Cable Television Information Center was developed with grants from the Ford and Markle Foundations. The center, established as part of the Urban Institute, was to serve as an information clearinghouse and consulting service for city governments wishing to franchise new cable systems to serve the urban areas (Head, 1973).

Based in part on the promises of the multitude of studies that gushed from the presses following the 1972 rules, cities began to expect "state-of-the-art" cable systems to be built in their communities. Large media conglomerates, operating as multiple system owners and anxious to break into the large cities, were encouraged to bid for the franchises or for the exclusive right [prior to *Community Communications Co. v. City of Boulder* (1981), and *Preferred Communications, Inc. v. City of Los Angeles* (1986) litigation] to wire a geographic area. The frenzy on the part of the cable operators to win entree into the large cities was fueled by the FCC decision to deregulate cable television following the release of its study of the economic and competitive costs of its rules on distant signal importation and syndicated exclusivity (Diamond, Sandler & Mueller, 1983).

Mark Fowler, chairman of the FCC, told cable television executives in his first major speech, that: "Technological developments are proceeding at such a rapid pace that many definitions of telecommunications are becoming blurred. Unless the commission remains sensitive to these constant changes and their implications, there is a danger that rules perhaps validly applied to one service may be inappropriately applied to another very different service" ("Fowler," 1981, p. 75). Under Fowler's leadership, deregulation became the order of the day at the FCC. With little federal regulation and copyright questions codified under the Copyright Act of 1976, cable television was free to offer appealing programming packages needed to attract subscribers in the media-rich large cities. To win the city franchise was to have the opportuntiy to partake in untold millions of potential subscriber fees; to lose was to forever be frozen out of operating in that market. The cable operators were willing to play a high-stakes game for the chance to win the prize. For example, in 1980 Teleprompter Corporation budgeted $7 to $10 per household in the franchise area just for preparation of proposal books, executive summaries, and community presentations (M. Manning, personal communication, December 12, 1989), and Times-Mirror spent $50,000 to produce a fifteen-minute videotape for presentation to a city council (I. Johnson, personal communication, December 12, 1989). With up to a dozen large cable operators bidding for the urban franchises, millions of dollars

were spent as the MSOs moved from city to city responding to requests for proposals (RFP) with each cable operator attempting to outbid the others with promises of "total communications networks,. . . a kaleidoscope of programming services,. . . an abundance of optional and premium services, . . .and special benefits for the city and its public institutions" (Times Mirror Cable Television, Scottsdale, 1981). This period, known as the "franchising wars," was fraught with political corruption as unscrupulous individuals sought to share in the millions of dollars being so recklessly lavished in the cities. One scheme, known as the rent-a-citizen plan, allowed the local individual with political influence to buy into the local cable company for only a few dollars; if the franchise was then won, presumably with local political help, the stock held by the individual would be worth millions (Perkins, 1981). After the rent-a-citizen scheme was made public to the embarrassment of some of the large MSOs, the companies turned to "give-away packages" in an attempt to buy influence from local institutions such as school districts, arts groups, and community organizations. To these groups went promises of dedicated cable channels, television studio equipment, and television production personnel (Times Mirror Cable Television, Scottsdale, 1981). "Cable TV companies have been paying princely tribute for the privilege of spinning their wires around the nation's cities. Besides forking over 5% of their gross revenues to city governments, they commonly promised to build fancy TV studios for free public use, to provide 100 or more channels to every customer, and in one case even to plant 20,000 trees on public property" (Cooney, 1983, p. 82). These packages, worth millions (Cross Country Cable, 1981; Times Mirror Cable Television, Scottsdale, 1981), were designed to turn the political heads of the community organizations while appearing to be a donation to public service. Other promises made to the cities in return for the rights to wire the area included the newest high technology services in addition to nearly one hundred channels of programming services. Specialized local channels for the hearing impaired, public school access, library access, the performing arts, local sports, vintage movies, business training, tourism and convention information, shoppers' guide, geriatric programming, health information, community bulletin board, university access, and alpha-graphic services were promised as well as the satellite-delivered cable networks, the premium channels and the local television stations (Times Mirror Cable Television, Scottsdale, 1981). In addition, new interactive communication services including video teleconferencing for businesses, data transmission for telecomputing, fire and health alarm services, surveillance services, two-way audio-video channels on a separate institutional network for lease to business for private communication services, and full videotext services were promised (Times Mirror Cable Television, Glendale, 1981). All of these communication advantages would belong to the city that granted the franchise to the proper applicant. The communication superhighway was only a signature away in many cities as the cable franchising juggernaut rolled across the country. The cities, exposed to the seemingly unlimited funds of the cable

operators and their slick, four-color executive summaries detailing the communications landscape, began to demand that the communication highways of the future be built as a condition of granting the franchise.

As franchising slowed and construction began, the cable operators discovered the extent of their promises. Before the middle of the 1980s, the cable industry was in financial trouble. "MSOs drowned in red ink as they tried to live up to the promises they had made in regard to wiring the cities" (Gross, 1990, p. 79). Franchising promises were broken as the MSOs folded or retrenched. Warner-Amex (developer of the Qube system) sold several of its cable systems, Group W went out of the cable business, and Storer and Times-Mirror traded systems so that they could run more efficiently due to geographic proximity ("Storer-Times," 1984, p. 37).

The first services to drown in a flood of red ink were the specialized channels and the new high technology services. Data transmission, alarm services, and videotext are no more in the land of cable. Interactivity or two-way communication, although flirted with by major communication conglomerates, such as Knight-Ridder's Viewtron, Times-Mirror's Gateway, and Warner-Amex's Qube, failed due to high costs and limited services (Gross, 1990). As services failed and systems looked for ways to survive economically, the cable industry turned to Congress for relief. Through lobbying efforts by the National Cable Television Association and authorship of a bill by Arizona Senator Barry Goldwater, the Cable Communication Policy Act of 1984 became law ("Happy talk," 1984, p. 50). The act, which is a set of amendments to the Communication Act of 1934, clarified the relationship between the local and federal agencies in cable regulation. The act, in effect, further deregulated cable television and freed cable from rate regulation and programming controls imposed by local franchises. The period of red ink was over, and the industry was ready to fulfill the economic promises to its stock-holders through marketing more channels of the traditional television fare, if not the new communication services.

Many consumers succumbed to the promise of the video feast. By 1984, about 40% of the American homes were cable subscribers, with 44% of those subscribers paying an additional fee to receive premium channels such as Home Box Office, Showtime, Playboy, or Disney (*Broadcasting/Cablecasting Yearbook*, 1984).

Between 1984 and 1990, an A.D. Little study, commissioned by the National Cable Television Association, reported industry revenue would double, from $8.4 billion to $16.5 billion, and after-tax net income would almost triple from $600 million to $1.7 billion ("Cable '85," 1985, p. 39). Just a whisper on Wall Street in the early 1970s, cable is a current favorite on the Big Board and an attractive investment.

But the predictions of diversified information services, in reality, have become a proliferation of existing broadcast television programming such as vintage re-runs, old movies and game shows with a smattering of original fare. The new programming concepts, such as

rock music videos, and video home shopping found on the specialized cable networks, are designed more for entertainment value than information. Interactive communication services have not been successful on cable television systems. The "national utility" was achieved to some extent, but not as fashioned by the cable futurists. The interactivity promised in the cable revolution is most visible in the guise of personal computers, telephones and FAX machines; the multi-purpose use of cable has given way to a multiple machine use. "It will be tragic indeed if the only cargoes that move on these [electronic] rails are thousands of reels of old film, thousands of tapes of game shows and situation comedies, thousands of exhortations to buy thousands of products, and thousands of hours of useless information" (Head, 1973, p. 28).

Stage IV: Interactive Information Services (The Future and the Reality)

The fourth stage in the development of cable television might more aptly be called the "phantom phase." In spite of reams of reports generated to describe the electronic communication marvels possible through the two-way broadband cable television systems, services such as banking at home, videotext, and home security systems have not found a niche in the marketing plans of the MSOs. The oft-touted non-television services have never materialized in a commercially feasible form. The much publicized two-way interactive services such as Qube, which were the cable communication laboratories of the 1970s, have all but disappeared. The technological terms for the non-television interactive services promised during the freeze on the late 1960s and again during the franchising wars of the late 1970s are no longer part of the lexicon of the cable television industry.

Cable television was reinvented once again when satellite technology became available. As early as 1945, Arthur C. Clarke perdicted that three manmade satellites positioned over the equator in a geosynchronous orbit of about 22,300 miles above the earth would enable radio transmissions to be relayed instantaneously to any part of the world (Clarke, 1945). That prophesy was fulfilled as satellite communication became a reality in the early 1960s. The first geosynchronous communication relay satellite--Early Bird--was launched in 1965. The communication link was used by network television to provide "worldwide television news coverage on a virtually 'instant' basis" ("The new age," 1965, p. 23). Cable utilization of the new cost effective television relay technology had to wait until 1974 when the fledging pay movie service Home Box Office obtained permission to transmit programming to cable television systems nationwide by satellite (Mair, 1988). That event, coupled with the first programming transmitted on a regular basis by 1975, was to change forever the definition of cable television (Mair, 1988). By 1976, Ted Turner, an Atlanta television station owner, had turned his local UHF television station into a "superstation" by distributing its signal to cable television stations across the nation (Whittemore, 1990). By 1980, Turner had developed and launched Cable News Network which provided a 24-hour continous news service to the American public via

satellite and cable television (Whittemore, 1990). Others followed quickly to the cost efficiencies of satellite distribution. By 1990, over 60 specialized cable networks (Broadcasting Yearbook, 1991) were being delivered by satellite and cable television had become defined by in the eyes of the consumer as MTV, ESPN, C-SPAN, WTBS, HBO, and CNN.

The "blue sky" predictions of the interactive information utility that was to form the backbone of the wired nation had been redefined. Cable television had become enamored with the "black sky" of space communication and the black ledgers that the multiplicity of national specialized cable/satellite networks produced.

The Telcos: The Return of the Rhetoric

The "blue sky" rhetoric present at virtually every phase of cable's development has now reared its head again in the form of promises offered by the telephone-operating companies as they lobby for relief from current regulation which has kept them out of the cable television business. In 1982, U.S. District Judge Harold Greene issued what came to be known as the Modified Final Judgment (MFJ) which required that A.T.&T. divest itself of the regional telephone operating companies (Shooshan, 1984). Under the MFJ, the Bell Regional Operating Companies were forbidden from offering enhanced information services (Crandall & Owen, 1984) and were further forbidden from operating a cable television system in their service area by the Cable Communication Act of 1984. However, with the advent of fiber optic technology, and the wiring of Cerritos, California by GTE (Katz, 1989) for experimentation in delivery of telephone, data and entertainment programs to the home through a single "fiber wire," the telephone companies sought regulatory freedom (Markoff, 1989).

In July 1991, the seven regional Bell operating companies (RBOCs) got their wish. Judge Greene lifted the restriction on the RBOC's entry into "information services" ("A foot in the door," 1991). This action put the telephone companies into direct competition with cable and broadcast television outside their service areas. "July 25 may go down as a very monumental day in the history of the ever-changing world of telecommunications," said Sen. Conrad Burns, the Republican from Montana ("A foot in the door," 1991, p. 23). The decision may open the door to a "wired nation," or it might be more of the same old rhetoric.

An National Association of Broadcasters statement in response to the decision said that "it will clearly have broad legal, regulatory, legislative and business implications" ("A foot in the door," 1991, p. 23). Robert Pepper, chief of the FCC Office of Plans and Policy, summed up the situation with "we will see for a very long time to come, facilities competition between cable operators and telephone companies. , ." (Video dial tone," 1991, p. 26).

The ball is now in Congress's court where bills affecting MFJ restrictions on the RBOCs are being considered. For example, the cable industry was dealt a blow with the U.S. Senate passage of S. 12, the Cable Television Consumer Protection Act, in early 1992. This bill would

allow RBOCs "...access to [cable network] programming, which would give cable competitors a crack at its [cable industry] most popular programming" ("Senate lowers the boom," 1992, p. 4). In the near future, the American public may receive their news from CNN over the telephone "wire" as the most notable competitors on the horizon are the RBOCs, and now with the legislative go-ahead are poised to strike.

As the phone companies gear up battle plans for the right to enter the cable television and information business on a large scale, the futuristic rhetoric returns ("Cable, telcos," 1989). The telephone companies, with their Integrated Services Digital Network (ISDN) can deliver voice, data and video signals simultaneously over the same fiber optic cable, thus enabling a multitude of services to be sent and received from the home over a single broadband fiber cable (Elias, 1989). "Visionaries foresee such things as home banking, electronic mail, picture telephones and customized television feeds becoming standard home fare" (Markoff, 1989, section 3, p.1). John Burgess, in an article in the *Washington Post* suggests that the fiber optic lines will become "a network of 'information highways' criss-crossing the country, conveying commercial and private data galore in the same way that asphalt arteries convey goods and services" (Burgess, 1989, p. C3). Others predict colleges without walls ("Maine launches," 1989) and telemedicine ("Telemedicine takes," 1989). The rhetoric sounds very familiar, but the players have changed. The "wired nation" of the 1990s is promised by the telephone companies if only changes in regulation are enacted which will permit them to enter the information ownership businesses. The cable television industry, that promised but did not deliver the "wired nation" of the 1970s and again of the 1980s, is fighting to keep the telephone companies from providing the second entertainment and information wire to the home ("USTA," 1989).

As the cable television industry faces re-regulation ("Voices," 1989), U.S. Rep. Edward J. Markey, chair of the House Subcommittee on Telecommunications and Finance, states: "As we begin a new era in the Information Age, there is an increased awareness that the essential fuels of this new age are no longer manpower and natural resources, but rather knowledge and ideas" (Markey, 1989, p. 71). The futuristic rhetoric is having an effect, but it is no longer the rhetoric of the cable television industry. The cable industry is "where broadcasters were 25 years ago, first place and center stage, an easy target. The challenge to cable is to regain political and customer esteem" (Hartson, 1989, p. 71).

The cable television industry is not alone in its battle with the RBOCs, the American Newspaper Publishers Association is also devoting resources to lobby efforts and public information campaigns ("Newspaper/RBOC", 1991, p. 8). ANPA president Cathleen Black stated: "We believe that a prohibition on RBOC's entry into electronic publishing over their own lines is good public policy." "Absent that bar, these multibillion-dollar corporations will be free to use profits from their local telephone monopolies to bankroll their entry into the

information services market, and to drive competitors off the road" ("A foot in the door," 1991, p. 24).

James Mooney, president of the National Cable Television Association has said that the first effects of the RBOCs entry into the information services business will be felt by the newspaper publishers "who will have many of their services duplicated by RBOC data transmission services." "We are obviously concerned that this . . . may lead to new anticompetitive abuses by the telephone companies, as they attempt to edge out independent providers of independent services" ("A foot in the door," 1991, p. 23).

Although the "information services" technology exists, there is a question of whether Stage IV of the development of the "wired nation" will ever reach fruition, either through cable or through the telephone companies. The rhetoric to shape public policy has become intense, but the real question is that of the First Amendment ramifications of either entry of the RBOCs into the "information services," or the denial of that entry.

Discussion and conclusions

Prior to entering a new phase, or stage of development in the diffusion of cable television, there has been significant publicity concerning the advantages of the "wired nation" concept and the role that cable television might play in the new information age. This has happened with each stage of development with the exception of the first when cable television, as an industry, was in its unorganized infancy. Each stage took form due to regulation which shaped the economic potential of the industry, rather than through technological development.

In Stage I, from the inception of the cable industry in 1948 to 1965 when the FCC initiated regulation, the cable industry operated as a group of small entrepreneurs developing technical systems from off-the-shelf electronic components to bring television signals to underserved areas of the nation.

Stage II, between 1965 and 1972, found cable operating in a highly regulated marketplace which determined who of the American public could receive cable television and who could not, thus artificially disrupting the diffusion process. The cable operators organized as an industry to fight regulation and in the process, "reinvented" again, the cable television business. This reinvention was the "wired nation" concept of the broadband communication potential of cable. The reinvention, fostered by the cable industry, was systematically sold as the future to both the public and regulators. This first rhetoric extolling the virtues of the information age whetted the public appetite for two-way, interactive services such as education, shopping, and banking at home as well as security, information, and a multitude of entertainment services.

From 1980 on, the cable industry sought to provide marketable services to the customers of the big cities. Major market economics and abundant off-air television signals demanded another reinvention of cable during this third stage. The public demanded non-broadcast

entertainment television services to supplement the programming of the three television networks and the occasional independent television station delivered by cable. This led to the concept of cable networks such as MTV, CNN, and the Nashville Network, as well as Home Box Office and the other pay-cable channels. Cable shifted from being ancillary to the broadcast industry to being a medium in its own right.

The entertainment packages that the public found attractive and subscribed to cable to obtain were not what the cable industry sold to the cities during the franchising wars in the latter part of the period. Again, the former reinvention of the wired nation concept was dusted off by the cable industry in order to convince the cities to grant franchises that would guarantee the communications highways of the future. Once the rhetoric had served its purpose and the franchises were won, the cable operators soon forgot the promised new services. Those who attempted to provide some of the exotic services soon found that the required technology did not yet exist or that the market did not want the service.

Stage IV, or the implementation of the interactive information technologies via broadband cable, has not materialized, but the promise of that stage and accompanying rhetoric have been used by the cable industry to lobby for regulatory relief. As that regulatory change was implemented, the cable industry was changed or was "reinvented" and each subsequent reinvention has altered the diffusion curve. Economic and regulatory constraints have had sufficient impact to render the normal "s" diffusion curve inoperable in the case of cable television.

Now a possible Stage V promises to be a battle for the most popular "wire" into U.S. homes and offices. That wire will belong to either the cable companies or consist of the RBOC's fiber optic system. Most assuredly this poses a variety of issues which will have a direct bearing on the interpretation of First Amendment rights. Craft (1990) writes that the crux of the issue lay in "the public's right to know, to tell, and to discover truth." These implicit rights contained in the First Amendment dictate that "Our democracy...and our libertarian theory of control of the press are all based on the concept of a free marketplace of ideas." While media businesses are the only industries specifically given constitutional protection, both cable and telcos are now demanding recognition of their First Amendment rights in the battle to own the single communication wire into the home. But the only justification for the media's First Amendment rights is based on the public's right to know. If either cable television or the telcos are to be a monopolistic medium and have no wired competitors, then that medium must be willing to carry all voices that speak on every side of a controversial issue. That would require a return to a fairness doctrine. As Craft (1990) states: "If citizens can only receive one wire, either from the cable companies or from the telcos, then free speech could be undermined, and the First Amendment rights of the public could be abridged. . . .The bottom line is, this battle may well be that the need to preserve the First Amendment rights of the public may not be the

most economical model for the development of our nation's future communication system. . . . The two wires may ultimately cost the consumer more, and the cable industry and the RBOCs may not make all the money that they would like, but that is the price that may have to be paid to preserve the free marketplace of ideas." In short, we must guard against developing into a nation of those who can afford information vs. those who cannot which might be created by the monoplistic practices of one wire into the home by either the cable companies or the telcos.

As cable television enters its fifth decade, the promise of the interactive two-way services is once again being portrayed as the future. And again that promise is tied to regulatory relief, but this time the players are different. It is now the regional telephone operating companies that are promising the communications future through a fiber optic network, and the cable industry that has used the same arguments in the past is crying "foul." However, if history can be used as a predictor, regulatory relief that would allow the regional telephone operating companies to enter the cable television business will not guarantee the promised wired nation. While regulation can impede the adoption of the two-way interactive technologies and services, only the economics of the marketplace will drive development and subsequent diffusion throughout the population. The resurrected rhetoric depicting interactive services acts as a useful function for the industry but should not be regarded as a valid predictor of the future.

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